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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,808

10/20/2003

Andrew D. Delano

200316149-1

4360

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08/03/2006

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EXAMINER

FRANTZ, JESSICA L

ART UNIT

PAPER NUMBER

3746

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/689,808	Applicant(s) DELANO ET AL.	
	Examiner Jessica L. Frantz	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) 5,21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities: The word "sendor" should be changed to "sensor" in line 5 of the claim. Appropriate correction is required.
2. Claims 21 and 22 are objected to because of the following informalities: Both are a new step in a method claim and are labeled (e). To make the claims more clear, they should be relabeled as (d) to better follow the parent claim 20 which is comprised of steps (a), (b), and (c). Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang et al. (TW 90128219). For translation purposes, please refer to United States Patent Application Publication 2003/0091441A1. Huang et al discloses a device, comprising: a fan (100) including a motor (not labeled but introduced in paragraph [0041] and discussed throughout), wherein said fan outputs fan speed data (Sw, see [0049]); a power supply (Not labeled but this is where the operating voltage Vcc comes from, see Figure 7) electrically coupled to said motor; and a controller (110 and 120) electrically coupled to said fan and said power supply, wherein said controller receives fan speed data (Sw, see Figure 7) and outputs a control signal to said power supply, wherein said

controller responds to decreases in fan speed below a normal speed by increasing power supplied to said fan. (Paragraphs [0049] and [0050]) Furthermore, Huang et al. discloses that the controller responds to increases in fan speed above a normal speed by decreasing power supplied to said fan and increasing power supplied to said fan exceeds a normal operating power of said fan. This is the typical way in which a controller controls the fan motor speed. The controller of Huang et al. is completely capable of directing the power supply to increase above a certain "normal" level. (Paragraph [0052]). Huang et al. further teaches the sending of a warning signal (CTS alarm Paragraph [0049]) to a user when increasing power is supplied to the fan. Huang et al.'s controller is disclosed as being able to perform numerous functions of the user's choice as it is able to store a plurality of programs to perform functions of signal transmission. (Paragraph [0041]). Therefore, this warning signal can be programmed to be sent to a user when the device is receiving increasing power or when any number of circumstances is met.

In reference to claim 5, the device of Huang et al. must also include a fan speed sensor. Since Huang et al.'s controller is receiving a rotation speed signal (S_w) it must be sent from a sensor. (Paragraph [0049]). And again as mentioned above, Huang et al. discloses that the controller responds to increases in fan speed above a normal speed by decreasing power supplied to said fan and increasing power supplied to said fan exceeds a normal operating power of said fan. This is the typical way in which a controller controls the fan motor speed. The controller of Huang et al. is completely capable of directing the power supply to increase above a certain "normal" level.

(Paragraph [0052]). Huang et al. further teaches the sending of a warning signal (CTS alarm Paragraph [0049]) to a user when increasing power is supplied to the fan. Huang et al.'s controller is disclosed as being able to perform numerous functions of the user's choice as it is able to store a plurality of programs to perform functions of signal transmission. (Paragraph [0041]). Therefore, this warning signal can be programmed to be sent to a user when the device is receiving increasing power or when any number of circumstances is met.

5. Claims 9-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sabini et al. (6,464,464). Sabini et al. discloses a device, comprising: a pump (20) including a motor (30), wherein said pump outputs pump speed data; a power supply (Not labeled, but necessary for operation of the electrical devices) electrically coupled to said motor; and a controller (10) electrically coupled to said pump and said power supply, wherein said controller receives pump speed data and outputs a control signal to said power supply, wherein said controller responds to decreases in pump speed below a normal speed by increasing power supplied to said pump. (Column 3, lines 15-20). Also, this is the normal manner in which a controller controls the pump.

Sabini et al. also discloses that the controller responds to increases in pump speed above a normal speed by decreasing power supplied to said pump and increasing power supplied to said fan exceeds a normal operating power of said pump. Again, this is the typical way in which a controller controls the pump speed. The controller of Sabini et al. is completely capable of directing the power supply to increase above a certain "normal" level because the controller is programmable, and one can

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program it to allow operation above a certain "normal" level . (Column 4, line 67 and Column 5 lines 1-3)). Sabini et al. further teaches the sending of a warning signal (second output control signal 19 to alarm monitor 23) to a user when increasing power is supplied to the pump.

In regards to claims 13-16, Sabini et a. further discloses a flow speed sensor (Not labeled but discussed in Column 3, lines 20-24) configured to output flow speed data; and that the controller is electrically coupled to said flow speed sensor (This is required in order for the flow speed sensor to operate), wherein said controller receives flow speed data and outputs a control signal to said power supply, wherein said controller responds to decreases in flow speed below a normal speed by increasing power supplied to said pump. (Column 3, lines 15-20). Also, this is the normal manner in which a controller controls the pump.

Sabini et al. also discloses that the controller responds to increases in pump speed above a normal speed by decreasing power supplied to said pump and increasing power supplied to said fan exceeds a normal operating power of said pump. Again, this is the typical way in which a controller controls the pump speed. The controller of Sabini et al. is completely capable of directing the power supply to increase above a certain "normal" level because the controller is programmable, and one can program it to allow operation above a certain "normal" level . (Column 4, line 67 and Column 5 lines 1-3)). Sabini et al. further teaches the sending of a warning signal (second output control signal 19 to alarm monitor 23) to a user when increasing power is supplied to the pump.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. (TW 90128219). For translation purposes, please refer to United States Patent Application Publication 2003/0091441A1. In regards to claims 17-19, since Huang et al. has the same structure as the claimed invention, it would have been obvious to one of ordinary skill in the art to conclude that Huang et al.'s apparatus will perform the same method steps as being claimed by the invention. The device of Huang et al. is capable of monitoring the speed of the fan and thereby detecting changes in the speed of the fan and increasing power to the fan when decreases in the fan speed below a normal speed are detected. Also, the device of Huang et al is capable of decreasing power to the fan when increases in the fan speed above a normal speed are detected and sending a warning to a user when increasing power to the fan. (Please refer to Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to operate the device of Huang et al. to perform the claimed method for the purpose of controlling the speed of the fan system.

8. Claims 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sabini et al. (6,464,464). Since Sabini et al. has the same structure as the claimed

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invention, it would have been obvious to one of ordinary skill in the art to conclude that Sabini et al.'s apparatus will perform the same method steps as being claimed by the invention. In regards to claims 20-22, Sabini et al's device is capable of monitoring the speed of a pump and thereby detecting changes in the speed of the pump and then increasing power to the pump when decreases in the pump speed below a normal speed are detected. Also, the device of Sabini et al. is capable of decreasing power to the pump when increases in the pump speed above a normal speed are detected and sending a warning to a user when increasing power to the pump. (Please refer to Figure 1 and 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to operate the device of Sabini et al. to perform the claimed method for the purpose of controlling the speed of the fan system.

In regards to claims 23-25, again since Sabini et al. has the same structure as the claimed invention, it would have been obvious to one of ordinary skill in the art to conclude that Sabini et al.'s apparatus will perform the same method steps as being claimed by the invention. Sabini et al's device is capable of monitoring the flow of a liquid and thereby detecting changes in the flow speed and then increasing power to a pump when decreases in the flow speed below a normal speed are detected. Also, the device of Sabini et al. is capable of decreasing power to the pump when increases in the flow speed above a normal speed are detected and sending a warning to a user when increasing power to the pump. (Please refer to Figure 1 and 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to

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operate the device of Sabini et al. to perform the claimed method for the purpose of controlling the speed of the fan system.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references substantially disclose the invention as claimed :

- Langley (6,428,282)
- Imblum et al. (6,092,992)
- Sabini et al. (6,709,241)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica L. Frantz whose telephone number is 571-272-5822. The examiner can normally be reached on Monday through Friday 8:30a.m.-5:00p.m. E.S.T..

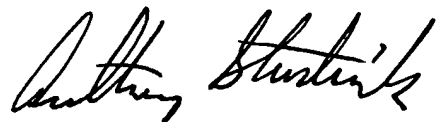
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe can be reached on (571)272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J.F.

JF



ANTHONY D. STASHICK
PRIMARY EXAMINER